

# CBLC Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1257a

# **Product Information**

IHC-P, WB, E
<u>Q9ULV8</u>
Human
Rabbit
Polyclonal
Rabbit IgG
RB0694
52456
1-30

## **Additional Information**

Gene ID	23624
Other Names	E3 ubiquitin-protein ligase CBL-C, 632-, RING finger protein 57, SH3-binding protein CBL-3, SH3-binding protein CBL-C, Signal transduction protein CBL-C, CBLC, CBL3, RNF57
Target/Specificity	This CBLC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CBLC.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CBLC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	CBLC
Synonyms	CBL3, RNF57
Function	Acts as an E3 ubiquitin-protein ligase, which accepts ubiquitin from specific

E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome. Functionally coupled with the E2 ubiquitin-protein ligases UB2D1, UB2D2 and UB2D3. Regulator of EGFR mediated signal transduction; upon EGF activation, ubiquitinates EGFR. Isoform 1, but not isoform 2, inhibits EGF stimulated MAPK1 activation. Promotes ubiquitination of SRC phosphorylated at 'Tyr-419'. In collaboration with CD2AP may act as regulatory checkpoint for Ret signaling by modulating the rate of RET degradation after ligand activation; CD2AP converts it from an inhibitor to a promoter of RET degradation; the function limits the potency of GDNF on neuronal survival.

#### **Tissue Location**

Ubiquitous..

## Background

CBLC proteins are a family of ubiquitin protein ligases (E3s) that negatively regulate signaling by targeting activated tyrosine kinases for degradation. Cbl- c is the most recently cloned member of the Cbl proteins and is expressed only in epithelial cells (the other Cbl proteins are ubiquitously expressed). Cbl-c, like the other mammalian Cbl proteins, can ubiquitinate the activated EGFR and target it for degradation. Through interactions with proteins containing SRC homology-2 (SH2) and SH3 domains, CBL proteins modulate downstream cell signaling.

## References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Keane, M.M., et al., Oncogene 18(22):3365-3375 (1999). Kim, M., et al., Gene 239(1):145-154 (1999).

### Images





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

CBLC Antibody (R10) (Cat. #AP1257a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the CBLC antibody detected the CBLC protein (arrow). Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.